

REMARKS

Status of the Application

Claims 1, 5-17, and 19-22 are all the claims in the application. Claim 1 has been amended for clarity. No new subject matter has been added.

The Office Action

Claims 1, 5, 9-11, 16, 17, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada (US 6,608,330) in view of Sasaoka (US 2003/0042496) and Stintz (US 2002/0114367).

Claims 6-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada, Sasaoka, and Stintz, and further in view of Hanaoka (US 5,804,839).

Claims 12, 13, and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada, Sasaoka, and Stintz, and further in view of Morita (US 6,121,636).

Claim 14 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada, Sasaoka, and Stintz, and in further view of Kaneyama (US 6,452,214).

Statement of Substance of Interview

Applicant gratefully acknowledges an interview granted by Examiner Huber and Supervisory Examiner Le with the undersigned. During the interview, Applicant's representative and the Examiners discussed the differences between the prior art references and the invention, based on the arguments on pages 6 to 8 of the Amendment filed November 24, 2010.

The Examiners proposed reciting in claim 1 "a light-emitting layer (15) comprised of a multiple quantum well structure." Further, the Examiners proposed to reverse the amendment to the current claim 1 to recite "all of the individual gallium nitride compound semiconductor well layers of the multiple quantum well structure light-emitting device each has the same composition." Examiner Huber stated that if claim 1 is amended, as proposed, the prior art rejections would be overcome.

Accordingly, Applicant amends claim 1, as proposed by the Examiner, and respectfully requests the rejection of the claims over Yamada, Sasaoka, and Stintz be withdrawn.

Claim Rejections under 35 U.S.C. § 103

A. Claims 1, 5, 9-11, 16, 17, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada in view of Sasaoka and Stintz.

Claim 1 recites among other elements: “a light-emitting layer (15) comprised of a multiple quantum well structure that is formed of at least one gallium nitride compound semiconductor barrier layer doped with an impurity element and at least one gallium nitride compound semiconductor well layer ...; ... all of the individual gallium nitride compound semiconductor well layers of the multiple quantum well structure each has the same composition.”

The multiple quantum well structure of Yamada comprises all of the layers 107, 108 and 109. The light emitting device of Yamada has a first well layer (108) and a second well layer (109) that differ in In composition. Yamada clearly teaches a well layer 109 having a composition different from that of well layers 107 and 108.

To the contrary, as claimed, each and all of the individual gallium nitride compound semiconductor well layers of the multiple quantum well structure have the same composition. Yamada does not teach or suggest all of the well layers to have the same composition, as claimed.

Sasaoka and Stintz do not cure any above-discussed deficiency of Yamada.

Accordingly, Applicants respectfully submit that the Examiner’s proposed combination does not teach or suggest at least: “all of the individual gallium nitride compound semiconductor well layers of the multiple quantum well structure each has the same composition.”

It is, therefore, respectfully submitted that **claim 1 and dependent claims 5, 9-11, 16, 17, and 19** are patentable.

B. Claims 6-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada, Sasaoka, Stintz, and Hanaoka.

Claims 12, 13, and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada, Sasaoka, Stintz, and Morita.

Claim 14 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada, Sasaoka, Stintz, and Kaneyama.

Claims 6-8 and 12-15 depend on claim 1. As discussed above, Yamada, Sasaoka, and Stintz do not teach all of the features of claim 1. Neither Hanaoka, Morita, nor Kaneyama cures any above-discussed deficiency of these references. It is, therefore, respectfully submitted that **claims 6-8 and 12-15** are patentable at least by virtue of their dependencies.

CONCLUSION

Withdrawal of all rejections and allowance of claims 1, 5-17, and 19-22 are earnestly solicited. In the event that the Examiner believes that it may be helpful to advance the prosecution of this application, the Examiner is invited to contact the undersigned at the local Washington, D.C. telephone number indicated below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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